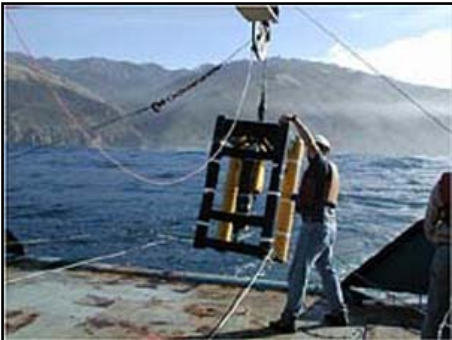
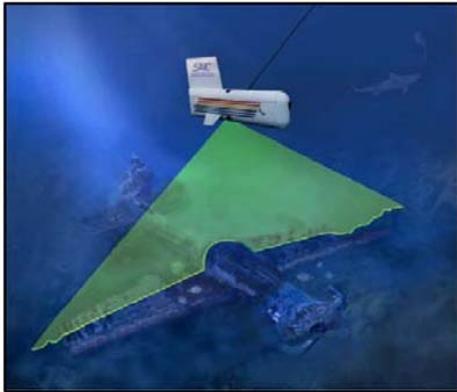

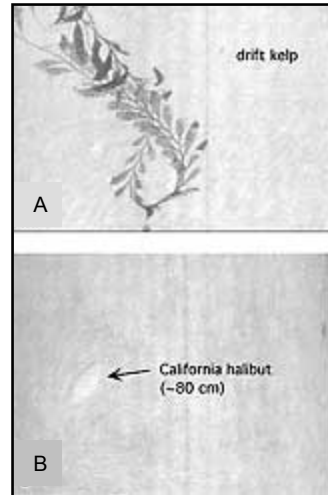




Summary View of Laser Line Scan Imaging Survey Technique



Application	Data Coverage	Resolution			Key Points
		Vertical	Horizontal	Image	
Benthic Imagery	Narrow Swath	m	m	cm	<ul style="list-style-type: none"> • Benthic Image, geo-referenced video or images • High-resolution panoramic laser images at rapid coverage rates • Limited swath coverage, but better than video • Provides strong ground truth for acoustic side-scan sonar data • High complexity and cost for acquisition and processing
Data Collection ¹			Raw Data ¹		Processed Data ¹
 <p>A Northrup-Grumman SM-2000 monochrome laser line scan integrated with a McCartney Underwater Technology FOCUS tow body, owned and operated by Science Applications International Corporation (SAIC).</p>  <p>Laser line scanning systems are towed below the surface.</p>			 <p>Laser image of a sharp boundary between sand waves (top left corner) and smooth seafloor. Dark objects in the area of sand waves are pieces of drift kelp.</p>		 <p>Identification of biological features by NOAA. Laser line scan images of (A) drift kelp at 45 m water depth, swath width 2.7 m and (B) California halibut, swath width 4.3 m.</p> <p>Data collected by laser line scanning allows for sediment and biological characterization of the seafloor.</p>

¹Data collection, raw data, and processed data examples and images provided by SAIC or NOAA (http://www.oar.noaa.gov/spotlite/archive/spot_laser.html).